Amendments to the Claims:

1. (Currently Amended) A method for preserving data in a data storage system, the method comprising:

receiving a command to preserve data in the data storage system;

receiving a first data being written to a data block on a first storage volume prior to receiving the command;

determining whether the data block is stored on a first storage image, the first image being a copy on write snapshot of the first storage volume created in response to the command, the operation of determining based on indication information associated with the first storage image;

writing the first data to the data block on the first storage image when the data block is stored on the first storage image;

~~indicating the data block being stored on a second storage image, the indication information being associated with a first storage image which is a copy on write snapshot; and~~

writing the first data to the data block on [[the]] a second storage image when the data block is stored on a second image; and

wherein the copy on write snapshot occurs without the data storage system being in a quiescent state.

2. (Cancelled)

3. (Currently Amended) The method of claim [[2]] 1, wherein the determining ~~and updating~~ comprises:

examining a lookup table to determine whether there is an entry associated with the data block, the lookup table being associated with the first storage image,~~; and~~

~~deleting the entry associated with the data block if the entry exists~~ wherein the entry indicates that the data block is stored on the first image.

4. (Currently Amended) The method of claim 1, further comprising:

acquiring a lock from a lock mechanism before indicating the data block being stored on [[a]] the second storage image; and

releasing the lock after writing the first data to the data block on the second storage image.

5. (Original) The method of claim 4, wherein the lock mechanism is maintained independent to the first and the second storage images.

6. (Currently Amended) The method of claim 1, further comprising:

receiving a second data being written to the data block on [[a]] the second storage volume after receiving the command;

determining whether the data block is stored on the first storage image or the second storage image;

~~updating the indication information to indicate the data block is stored on the second storage image;~~

when the data block is stored on the second storage image, replicating ~~an existing data stored on~~ the data block of the second storage image to the first storage image and updating the indication information; and

writing the second data to the data block on the second storage image.

7. (Cancelled)

8. (Currently Amended) The method of claim [[7]]6, wherein the determining ~~and updating~~ comprises:

examining a lookup table whether there is an entry associated with the data block, the lookup table being associated with the first storage image; and

wherein updating the indication information comprises creating the entry associated with the data block if the entry does not exist.

9. (Original) The method of claim 6, further comprising:

acquiring a lock from a lock mechanism before updating the indication information; and

releasing the lock after writing the second data.

10. (Original) The method of claim 9, wherein the lock mechanism is maintained independent to the first and the second storage images.

11. (Original) The method of claim 1, further comprising:

receiving a request to read from a data block on the first storage volume;

determining whether the data block is stored on the first storage image or on the second storage image, based on indication information associated with the first storage image;

reading the data block from the first storage image if the data block is stored on the first storage image; and

reading the data block from the second storage image if the data block is stored on the second storage image.

12. (Original) The method of claim 11, further comprising examining a lookup table whether there is an entry associated with the data block, the lookup table being associated with the first storage image.

13. (Original) The method of claim 11, further comprising:

acquiring a lock from a lock mechanism before determining whether the data block is stored on the first storage image or on the second storage image; and

releasing the lock after reading the data block from the second storage image.

14. (Original) The method of claim 13, wherein the lock mechanism is maintained independent to the first and the second storage images.

15. (Currently Amended) A machine-readable medium having executable code to cause a machine to perform a method for preserving data in a data storage system, the method comprising:

receiving a command to preserve data in the data storage system;

receiving a first data being written to a data block on a first storage volume prior to receiving the command;

determining whether the data block is stored on a first storage image, the first image being a copy on write snapshot of the first storage volume created in response to the command, the operation of determining based on indication information associated with the first storage image;

writing the first data to the data block on the first storage image when the data block is stored on the first storage image;

~~indicating the data block being stored on a second storage image, the indication information being associated with a first storage image which is a copy on write snapshot; and~~

writing the first data to the data block on [[the]] a second storage image when the data block is stored on a second image; and

wherein the copy on write snapshot occurs without the data storage system being in a quiescent state.

16. (Cancelled)

17. (Currently Amended) The machine-readable medium of claim [[16]]15, wherein the determining ~~and updating~~ comprises:

examining a lookup table to determine whether there is an entry associated with the data block, the lookup table being associated with the first storage image~~,; and~~

~~deleting the entry associated with the data block if the entry exists~~ wherein the entry indicates that the data block is stored on the first image.

18. (Currently Amended) The machine-readable medium of claim 15, wherein the method further comprises:

acquiring a lock from a lock mechanism before indicating the data block being stored on [[a]] the second storage image; and

releasing the lock after writing the first data to the data block on the second storage image.

19. (Original) The machine-readable medium of claim 18, wherein the lock mechanism is maintained independent to the first and the second storage images.

20. (Currently Amended) The machine-readable medium of claim 15, wherein the method further comprises:

receiving a second data being written to the data block on [[a]] the second storage volume after receiving the command;

determining whether the data block is stored on the first storage image or the second storage image;

~~updating the indication information to indicate the data block is stored on the second storage image;~~

when the data block is stored on the second storage image, replicating ~~an existing data stored on~~ the data block of the second storage image to the first storage image and updating the indication information; and

writing the second data to the data block on the second storage image.

21. (Cancelled)

22. (Currently Amended) The machine-readable medium of claim [[21]]20, wherein the determining ~~and updating~~ comprises:

examining a lookup table whether there is an entry associated with the data block, the lookup table being associated with the first storage image; and

wherein updating the indication information comprises creating the entry associated with the data block if the entry does not exist.

23. (Original) The machine-readable medium of claim 20, wherein the method further comprises:

acquiring a lock from a lock mechanism before updating the indication information; and

releasing the lock after writing the second data to the data block on the second storage image.

24. (Original) The machine-readable medium of claim 23, wherein the lock mechanism is maintained independent to the first and the second storage images.

25. (Original) The machine-readable medium of claim 15, wherein the method further comprises:

receiving a request to read from a data block on the first storage volume;

determining whether the data block is stored on the first storage image or on the second storage image, based on indication information associated with the first storage image;

reading the data block from the first storage image if the data block is stored on the first storage image; and

reading the data block from the second storage image if the data block is stored on the second storage image.

26. (Original) The machine-readable medium of claim 25, wherein the method further comprises examining a lookup table whether there is an entry associated with the data block, the lookup table being associated with the first storage image.

27. (Original) The machine-readable medium of claim 25, wherein the method further comprises:

acquiring a lock from a lock mechanism before determining whether the data block is stored on the first storage image or on the second storage image; and

releasing the lock after reading the data block from the second storage image.

28. (Original) The machine-readable medium of claim 27, wherein the lock mechanism is maintained independent to the first and the second storage images.

29. (Currently Amended) An apparatus for preserving data in a data storage system, comprising:

means for receiving a command to preserve data in the data storage system;

means for receiving a first data being written to a data block on a first storage volume prior to receiving the command;

means for determining whether the data block is stored on a first storage image, the first image being a copy on write snapshot of the first storage volume created in response to the command, the means for determining based on indication information associated with the first storage image;

means for writing the first data to the data block on the first storage image when the data block is stored on the first storage image;

~~means for indicating the data block being stored on a second storage image, the indication information being associated with a first storage image which is a copy on write snapshot; and~~

means for writing the first data to the data block on [[the]] a second storage image when the data block is stored on a second image; and

wherein the copy on write snapshot occurs without the data storage system being in a quiescent state.

30. (Cancelled)

31. (Currently Amended) The apparatus of claim [[30]]29, wherein the means for determining ~~and means for updating~~ comprises:

means for examining a lookup table to determine whether there is an entry associated with the data block, the lookup table being associated with the first storage image,[[; and]]

~~means for deleting the entry associated with the data block if the entry exists~~ wherein the entry indicates that the data block is stored on the first image.

32. (Currently Amended) The apparatus of claim 29, further comprising:

means for acquiring a lock from a lock mechanism before indicating ~~indicating~~ the data block being stored on [[a]] the second storage image; and

means for releasing the lock after writing the first data to the data block on the second storage image.

33. (Original) The apparatus of claim 32, wherein the lock mechanism is maintained independent to the first and the second storage images.

34. (Currently Amended) The apparatus of claim 29, further comprising:

means for receiving a second data being written to the data block on [[a]] the second storage volume after receiving the command;

means for determining whether the data block is stored on the first storage image or the second storage image~~updating the indication information to indicate the data block is stored on the second storage image~~;

means for replicating ~~an existing data stored on~~ the data block of the second storage image to the first storage image and means for updating the indication information when the data block is stored on the second storage image; and

means for writing the second data to the data block on the second storage image.

35. (Cancelled)

36. (Currently Amended) The apparatus of claim [[35]]34, wherein the means for determining ~~and means for updating~~ comprises:

means for examining a lookup table whether there is an entry associated with the data block, the lookup table being associated with the first storage image; and

wherein the means for updating the indication information comprises means for creating the entry associated with the data block if the entry does not exist.

37. (Original) The apparatus of claim 34, further comprising:

means for acquiring a lock from a lock mechanism before updating the indication information; and

means for releasing the lock after writing the second data.

38. (Original) The apparatus of claim 37, wherein the lock mechanism is maintained independent to the first and the second storage images.

39. (Original) The apparatus of claim 29, further comprising:

means for receiving a request to read from a data block on the first storage volume;

means for determining whether the data block is stored on the first storage image or on a second storage image, based on indication information associated with the first storage image;

means for reading the data block from the first storage image if the data block is stored on the first storage image; and

means for reading the data block from the second storage image if the data block is stored on the second storage image.

40. (Original) The apparatus of claim 39, further comprising means for examining a lookup table whether there is an entry associated with the data block, the lookup table being associated with the first storage image.

41. (Original) The apparatus of claim 39, further comprising:

means for acquiring a lock from a lock mechanism before determining whether the data block is stored on the first storage image or on a second storage image; and

means for releasing the lock after reading the data block from the second storage image.

42. (Original) The apparatus of claim 41, wherein the lock mechanism is maintained independent to the first and the second storage images.

43. (Currently Amended) A data storage system, comprising:

a processing system; and a memory coupled to the processing system, the memory storing instructions, which when executed by the processing system, cause the processing system to perform the operations of:

receiving a command to preserve data in the data storage system;

receiving a first data being written to a data block on a first storage volume prior to receiving the command;

determining whether the data block is stored on a first storage image, the first image being a copy on write snapshot of the first storage volume created in response to the command, the operation of determining based on indication information associated with the first storage image;

writing the first data to the data block on the first storage image when the data block is stored on the first storage image;

~~indicating the data block being stored on a second storage image, the indication information being associated with a first storage image which is a copy on write snapshot; and~~

writing the first data to the data block on [[the]] a second storage image when the data block is stored on a second image; and

wherein the copy on write snapshot occurs without the data storage system being in a quiescent state.

44-68. (Cancelled)